

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
7 October 2004 (07.10.2004)

PCT

(10) International Publication Number  
**WO 2004/085477 A1**

(51) International Patent Classification<sup>7</sup>: **C07K 16/24**,  
A61K 39/395, 39/385, 39/00, A61P 37/02, 11/00, 37/08

(21) International Application Number:  
PCT/EP2004/050375

(22) International Filing Date: 26 March 2004 (26.03.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
03447070.8 28 March 2003 (28.03.2003) EP  
60/461,687 9 April 2003 (09.04.2003) US

(71) Applicant (for all designated States except US): INNO-  
GENETICS N.V. [BE/BE]; Technologiepark 6, B-9052  
Ghent (BE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): DEPRAETERE,  
Stany [BE/BE]; Gentsstraat 224, B-9700 Oudenaarde  
(BE). LORRÉ, Katrien [BE/BE]; Lievekaai 12, B-9000  
Ghent (BE). BUYSE, Marie-Ange [BE/BE]; Burg. E.  
Ronsestraat 23, B-9820 Merelbeke (BE).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), Euro-  
pean (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,  
GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK,  
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,  
ML, MR, NE, SN, TD, TG).

**Published:**

- with international search report
- before the expiration of the time limit for amending the  
claims and to be republished in the event of receipt of  
amendments
- with (an) indication(s) in relation to deposited biological  
material furnished under Rule 13bis separately from the  
description

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: TREATMENT OF TYPE 1 IMMUNE RESPONSE-MEDIATED INFLAMMATORY LUNG DISEASE BY MODULA-  
TION OF IFN-GAMMA ACTIVITY

(57) Abstract: The present invention relates to preventing, or treating and/or reducing the severity or progression of Type 1 immune response-mediated inflammatory lung disease. More particularly, the present invention provides a method for preventing or treating chronic obstructive pulmonary disease (COPD), severe asthma, sarcoidosis, berylliosis or cystic fibrosis by neutralizing or reducing IFN $\gamma$  bioactivity which can be achieved either by in vivo administration of IFN $\gamma$  neutralizing molecules or by in vivo immunization with pharmaceutical compositions comprising immunogenic IFN $\gamma$  proteins or IFN $\gamma$ -derived (poly)peptides or their corresponding nucleic acid sequences.



WO 2004/085477 A1